

IN THE SPECIFICATION

Please amend paragraph 20 at page 11, lines 4-15, as follows:

[0020] The present invention also provides a method and computer program for authorizing an electronic data transfer ~~comprising~~ that receives an authentication request containing a digital certificate and information about the electronic data transfer from a requesting device via a communication link, and then determines whether the digital certificate is valid. The present invention then creates an authentication response denying the authentication request when the digital certificate is not valid, or approving the authentication request when the digital certificate is valid. The authentication response is then sent to the requesting device via the communication link. In addition, a digital receipt is created for the electronic data transfer when the digital certificate is valid. Information about the electronic data transfer, the digital certificate and at least a portion of the authentication response is also stored.

Please amend paragraph 41 at page 23, lines 9-17, as follows:

[0041] Another area of concern addressed by the present invention lies within the Certificate Authorities (“CA’s”). Such authorities are the current manufacturers and issuers of digital certificates that utilize the PKI technology. Currently, PKI technology only addresses a portion of the legal requirements associated with HIPAA and eSign compliance. More specifically this is Authenticity (verification). Entity Authentication (Verification) is the single greatest strength of PKI technologies. Of course, for this piece of HIPAA compliance to work, proper and full

integration of this capability must be ~~addresses into~~ addressed in all healthcare applications containing or manipulating patient information.

Please amend paragraph 52 at page 29, line 18 to page 30, line 16, as follows:

[0052] FIGURE 5 depicts a flow diagram of a prescription system in accordance with the present invention. The system starts in block 505. The doctor completes the screen form in block 510. Integrity validation on the prescription is performed in block 515. The validity (i.e., existence and revocation status) of the doctor's digital certificate is performed in block 520. Once authorization is received, the doctor is presented with an acknowledgement screen in block 525. The prescription that the doctor created is then stored/vaulted in master vault ~~575~~ 580 to await access by the pharmacist. A receipt recording the doctor's transaction is generated at block 530 and stored in master vault ~~575~~ 580. An electronic notification notifies the pharmacy in block 535 that a prescription has arrived. Before the pharmacist can open the prescription, integrity validation on the prescription is performed in block 540. The validity (i.e., existence and revocation status) of the physician's digital certificate is performed in block 545. The pharmacist opens the prescription in block 550. A receipt recording the pharmacist's actions is generated in block 555 and stored in master vault 580. The pharmacist then fills the prescription in block 560. The patient receives the prescription in block 565. The patient transaction is confirmed and a receipt generated in block 570. The receipt is stored in master vault 580. An acknowledgement screen is displayed to the pharmacist in block 575. The system then terminates at block 585.

Please amend paragraph 53 at page 30, line 17 to page 31, line 18, as follows:

[0053] FIGURE 6 depicts a flow diagram of an alternative prescription system in accordance with the present invention. The system starts in block 605. The doctor completes the screen form in block ~~640~~ 610. Integrity validation on the prescription is performed in block 615. The validity (i.e., existence and revocation status) of the doctor's digital certificate is performed in block 620. Once authorization is received, the doctor is presented with an acknowledgement screen in block 625. The prescription that the doctor created is then stored/vaulted in virtual vault 632. The prescription is also sent to virtual vault 657 to await access by the pharmacist. A receipt recording the doctor's transaction is generated at block 630 and stored in virtual vault 632. An electronic notification notifies the pharmacy in block 635 that a prescription has arrived. Before the pharmacist can open the prescription, integrity validation on the prescription is performed in block 640. The validity (i.e., existence and revocation status) of the physician's digital certificate is performed in block 645. The pharmacist opens the prescription in block 650. A receipt recording the pharmacist's actions is generated in block 655 and stored in virtual vault 657. The pharmacist then fills the prescription in block 660. The patient receives the prescription in block 665. The patient transaction is confirmed and a receipt generated in block 670. The receipt is stored in virtual vault 672. An acknowledgement screen is displayed to the pharmacist in block 675. The system then terminates at block 685. The data stored in virtual vault 632, virtual vault 657 and virtual vault 672 contains unique identifiers indicating the relationship between the data in each virtual vault. The data may then be "trickled down" to master vault 680.

Please amend paragraph 57 at page 33, line 19 to page 34, line 22, as follows:

[0057] FIGURE 9 depicts a flow diagram of an alternative overall system in accordance with the present invention. The system starts in block 905. The purchaser completes the screen form in block ~~940~~ 910. Integrity validation on the electronic document is performed in block 915. The validity (i.e., existence and revocation status) of the purchaser's digital certificate is performed in block 920. Once authorization is received, the purchaser is presented with an acknowledgement screen in block 925. The electronic document that the purchaser created is then stored/vaulted in virtual vault 932. The electronic document is also sent to virtual vault 957 to await access by the seller. A receipt recording the purchaser's transaction is generated at block 930 and stored in virtual vault 932. An electronic notification notifies the seller in block 935 that an electronic document has arrived. Before the seller can open the electronic document, integrity validation on the electronic document is performed in block 940. The validity (i.e., existence and revocation status) of the purchaser's digital certificate is performed in block 945. The seller opens the electronic document in block 950. A receipt recording the seller's actions is generated in block 955 and stored in virtual vault 957. The seller then fills the order in block 960. The purchaser receives the order in block 965. The purchaser transaction is confirmed and a receipt generated in block 970. The receipt is stored in virtual vault 972. The seller then receives payment for the order in block 975. The seller transaction is confirmed and a receipt generated in block 980. The receipt is stored in virtual vault 982. An acknowledgement screen is displayed to the seller in block 985. The system then terminates at block 995. The data stored in virtual vault 932, virtual vault 957, virtual vault 972 and virtual vault 982 contains unique identifiers indicating the relationship between the data in each virtual vault. The data may then be "trickled down" to master vault 990.

Please amend paragraph 72 at page 41, line 15 to page 42, line 3, as follows:

[0072] The data flow in FIGURE 20 starts in block 2005. A user navigates to the URL in block 2010 where the user logs-in, validating his/her identity in block 2015. The system determines if the user is a doctor, a pharmacist or neither at decision point 2020. If neither, the attempt is logged at block 2022 and the data flow ends at block 2085. If the user is a doctor, the system allows viewing of the doctor screens in block 2025. The doctor accesses and completes the prescription form in block 2030 and then submits it in block 2035. A digital signature is applied to the prescription form in block 2040. Feedback is provided to the doctor regarding the status of the prescription, such as "Prescription Sent to Vault" in block 2045. Notification is sent to the pharmacist in block 2050 and that arm of the data flow ends in block 2085.

Please amend paragraph 73 at page 42, lines 4-11, as follows:

[0073] If the user is determined to be a pharmacist at decision point ~~1720~~ 2020, the pharmacist views the queue in block ~~1755~~ 2055. The pharmacist is authorized to view the prescription in block ~~1760~~ 2060. A receipt is generated and a printout triggered in block ~~1765~~ 2065 when the pharmacist opens the prescription. The pharmacist fills the prescription, which is then signed and a receipt generated in block ~~1770~~ 2070. The patient picks-up the prescription in block ~~1775~~ 2075. A clerk generates a receipt and a doctor notification message in block ~~1780~~ 2080. The data flow ends at block ~~1785~~ 2085. Alternatively, the doctor could be a purchaser, the pharmacist a seller, and the prescription an order.

Application No.; 09/837,884
Reply to Office Action of September 21, 2004

Attorney Docket No. 124521-1000